sustained after repeated onabotulinumtoxinA treatment. However, neurogenic inflammation and urothelial cell apoptosis after SCI could not adequately improve after repeated onabotulinumtoxinA injection.

NDP088:
MATERNAL FRUCTOSE EXPOSURE PROGRAMS METABOLIC SYNDROME-ASSOCIATED BLADDER OVERACTIVITY IN YOUNG ADULT OFFSPRING

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Purpose: To investigate effects of MFE on developmental programming of MetS-associated bladder dysfunction and identify potential transcripts involved in the programmed bladder overactivity in adult offspring.
Materials and Methods: Pregnant Sprague-Dawley rats received a fructose-enriched or control diet during pregnancy and lactation. Male offspring were studied for the phenotypes of MetS and voiding behavior at the age of 12 week. Next-generation sequencing and qPCR were used to screen and validate transcript alterations in rat bladders. In vivo cystometry and in vitro detrusor contractility were used to evaluate bladder function. Bladder tissues were obtained for Western blotting of postsynaptic receptors.
Results: Compared to controls, MFE offspring showed bladder overactivity and traits of MetS. Alterations in bladder transcripts, including increased mRNA levels of M2- and M3-mAChR, P2 X 1 receptor, and VPAC2 receptor and decreased mRNA levels of TRPV4 receptor, were found in MFE offspring. Significantly decreased carbachol-induced contractility combined with upregulation of M2- and M3-mAChR receptors and P2 X 1 receptor proteins of the bladder were noted in MFE offspring.
Conclusion: Our data show MFE can program MetS-associated bladder overactivity in young adult male offspring. Alterations in bladder transcripts, including Chrm2, Chrm3, P2rx1, Trpv4, and Vipr2 gene expression, may be associated with primary or secondary programmed bladder dysfunction in MFE offspring. Decreased carbachol-induced contractility, along with upregulation of M2- and M3-muscarinic receptors and P2 X 1 receptor protein expression in the bladder, may underlie the pathophysiology of programmed bladder dysfunction in adult offspring to MFE.

NDP089:
FEMALE BLADDER NECK DYSFUNCTION – A VIDEOURODYNAMIC ANALYSIS OF FEMALE VOIDING DYSFUNCTION

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Purpose: Diagnosis and treatment of voiding dysfunction (VD) in women can be challenging. In this study, we examined the heterogeneous nature of female VD and in particular, bladder neck dysfunction (BND) and its treatment.
Materials and Methods: We retrospectively reviewed videourodynamic reports (VUDS) from 1914 women who referred to us for investigation of VD. Based on their VUDS findings, female VD can be divided into 2 categories: bladder dysfunction (BD) and bladder outlet dysfunction (BOD). BOD is consisted of bladder neck dysfunction (BND), cystolocele, dysfunctional voiding (DV), poor relaxation of the external sphincter (PRES), and urethral stricture (US). We focused on age distribution, presence of detrusor overactivity (DO), influence of co-morbidities and treatment modalities in BND.
Results: In female VD, BOD was accounts for 42.3% (810/ 1914) of all cases. BND is among the common causes of BOD (12.3%; 100/ 1914) (Fig.1). BND was prevalent in patients aged >55 years (72%). For majority of cases (51.6%), DO was a concurrent VUDS feature in those older than 55 years of age (Fig.2). Although several co-morbidities were identified in women with VD, including hypertension, type2 diabetes, coronary artery disease, chronic kidney disease and chronic obstructive pulmonary disease; none of these were found to have significantly correlation with BND. Use of alpha blockers can significantly improve maximal flow rate (Qmax) in BND from 7.6 ± 4.39 ml/s to 12.06 ± 4.99 ml/s ($p = 0.000$). Transurethral incision of bladder neck (TUI-BN) can also facilitate self voiding in the cases of BND refractory or intolerant to alpha blockers.
Conclusions: Voiding dysfunction (VD) in women is rather a complex and poorly-understood disorder. BND is prevalent in patients older than 55 and is highly associated with DO. Alpha blockers and TUI-BN are effective in improving Qmax in BND.

NDP090:
CHOLECYSTECTOMY IS NECESSARY OR NOT ABOUT THAT KETAMINE ABSUE INDUCES CHOLESTASIS WITH COMMON BILE DUCT DILATATION?

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A 23-year-old woman was admitted due to upper and lower abdominal pain for a period of time. She had ketamine abuse since 6 years ago. She snorted ketamine powder about 3 gm/day. Lower urinary tract symptoms including frequency, voiding pain and suprapubic pain always bother her. She stopped using ketamine for about 1 year due to pregnancy. Lower urinary tract symptoms got resolution. Unfortunately, she snorted ketamine again because of poor couple relationships. About 5 gm/day of ketamine powder snorting. One month later, she suffered from epigastralgia, abdominal pain, suprapubic pain and gross hematuria. She presented to Emergency room for help. The evaluation of her abdominal pain include an abdominal ultrasound that showed a dilated common bile duct (CBD) and gallbladder, CT scan of the abdomen that revealed dilatation of the common bile duct and wall thickening of urinary bladder, and an esophagoduodenoscopy that showed gastritis.
2 months later, she was seen in ER again due to severe abdominal pain. CT scan of the abdomen was performed again and showed common bile duct dilatation and suspect cholangitis. Laparoscopic cholecystectomy was done. Pathologic finding was abortive mucosal epithelium with inflammatory and edematous stroma and diffuse inflammatory infiltrates and Rokitansky-Aschoff sinues.
She still had ketamine abuse after operation. Severe abdominal pain and suprapubic pain troubled her. She asked urologist for further evaluation and treatment. The patient stopped ketamine abuse by combining pain control, infection control and psychotherapy. Dramatically symptoms and signs about abdominal pain got complete resolution one month later.
We report the case of ketamine abuse with cholestasis and common bile duct dilatation in the absence of an obstructive lesion. Cessation of ketamine abuse is the first line treatment and to avoid unnecessary operation.

NDP091:
INTERSTITIAL CYSTITIS/BLADDER PAIN SYNDROME HAS ASSOCIATION WITH HYSTERECTOMY IN MIDDLE AGE FEMALE

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Purpose: Symptoms of interstitial cystitis/bladder pain syndrome (IC/BPS) are often confused with uterine conditions. Gynecologists may therefore recommend hysterectomy which was inappropriate for these patients. This study investigated whether IC/BPS increases the risk of hysterectomy in a large nationwide retrospective cohort study.
Materials and Methods: From a national insurance database, we identified women diagnosed with IC/BPS between 2002 and 2013. Those with a history of hysterectomy before IC/BPS diagnosis were excluded. All women were stratified into three subgroups (younger, middle, older age) based on the propensity scores of 15 confounding factors, including age and comorbidities. All were followed until the end of 2013 to detect the event of hysterectomy. The hazard ratio (HR) of hysterectomy in the IC/BPS